

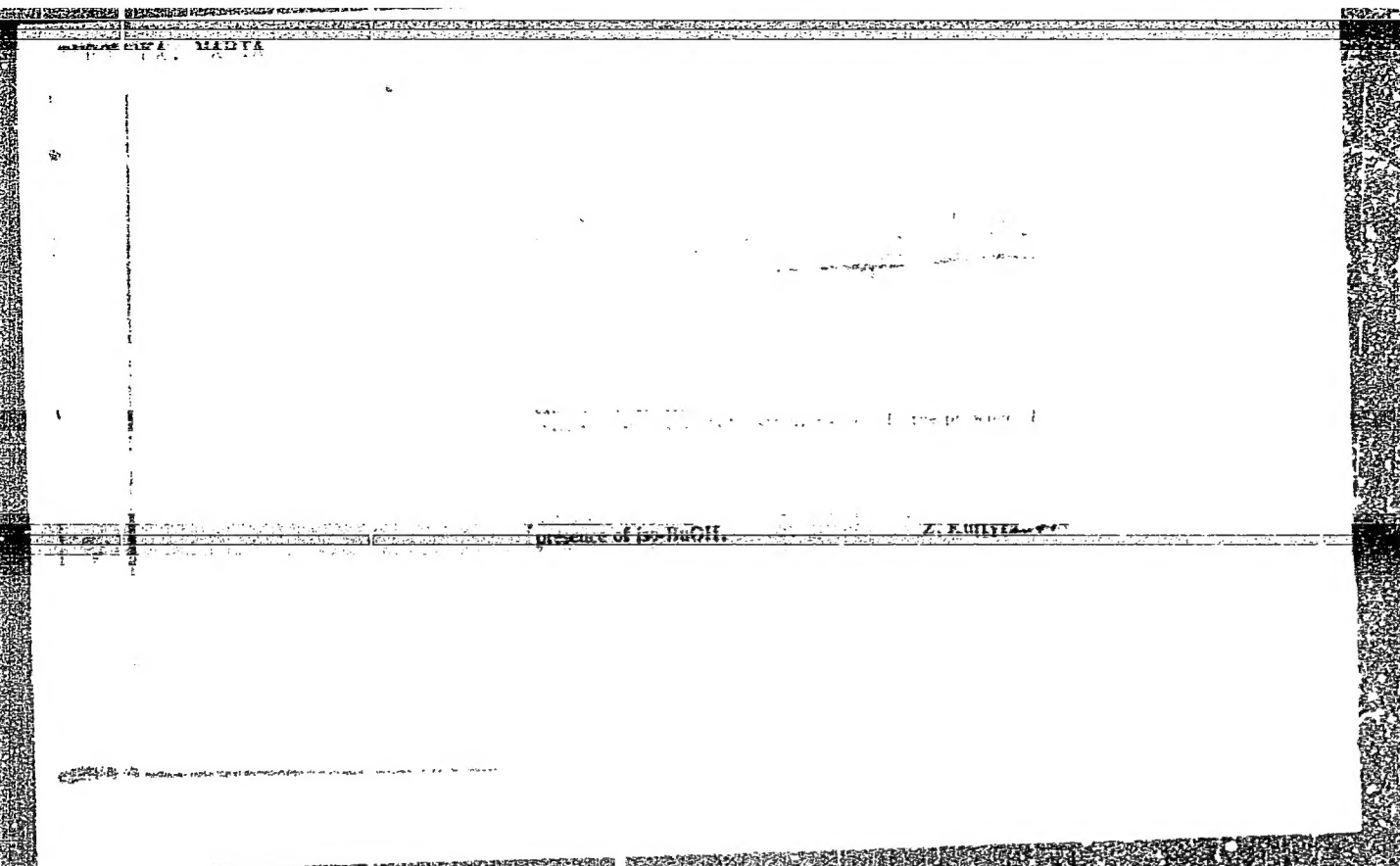
COUNTRY	:	Poland	E-1
CATEGORY	:		
ABST. JOUR.	:	RZKhim., No. 22 1959, No.	73256
AUTHOR	:		
INST.	:		
TITLE	:		
ORIG. PUB.	:		
ABSTRACT	:	In the presence of alcohols (10 ml) the pH of the indicator transition is shifted to lower values. The shift is the more marked the higher the molecular weight of the alcohol used. A. Nemodruk	

CARD: 4/4

84

TURONSKA, J. A. J.

Augustinus Michalski and Marie Turonka: "N,N'-Dipropyl-,N,N'-Diphenyl-,N,N'-Ditolyl- and N,N'-Diallyl-Biacridinium Nitrates as Chemiluminescent Indicators," Letter to the Editor, Reczniki Chemii, Vol 30, No 3, Warsaw, 1954. Published from the Chair of Inorganic Chemistry, Lodz University, 10 Feb 56.



MICHALSKI, Euganiusz; TUROWSKA, Maria

Analytical application of chemiluminescent diacridine derivatives.
I. Identification of some aliphatic alcohols. II. Determination of
methanol and ethanol in their mixture. Chem anal 5 no.4:625-636
'60. (EEAI 10:9)

1. Department of Inorganic Chemistry, University, Lodz.

(Biacridine)	(Luminescence)	(Aliphatic compounds)
(Alcohols)	(Methanol)	(Ethyl alcohol)

TUROWSKA, Maria

Diacridine derivatives as indicators in titration of weak acids.
Chem anal 5 no.5:815-821 '60. (EEAI 10:9)

1. Department of Inorganic Chemistry, University, Lodz.

(Acridine) (Acids)

POLAND

ADAMSKI, R. and TUROWSKA, W., of the Department of Applied Pharmacy, School of Medicine (Zaklad. Farmacji Stosowanej Akademii Medycznej w Poznaniu), Poznan. Dr. R. Adamski, Head.

"Behavior of Anthracene Compounds in Dry Extracts of Rhamni frangulae on Prolonged Storage"

Warsaw, Farmacja Polska, Vol 23, No 2, February 67, pp 109-114

Abstract: Methanol extracts of the dry extracts of Rhamni frangulae were separated by thin-layer chromatography. The spots were identified by the Borntrager reaction and by means of standards. Daylight color and fluorescence in the UV were examined. A considerable drop in the glycofranguline content was noted, associated with a drop in the pharmacological activity of the drug. An increase in the hydrolysis product content was observed. Contains 4 Figures, 3 Tables and 7 references (3 Polish and 4 German-language).

TUROWSKI, E.

Plannning of locomotive repair.

P. 199. (PRZEGLAD KOLEJOWY MECHANICZNY) (Warszawa, Poland) Vol. 9, no. 7, July,,1957

SO: Monthly Index of East European Accession (EEAI) LC Vol. 7, No. 5, 1958

TURAWSKI, E.

Principles of lubrication and consumption of lubricating oils
on standard gauge locomotives of the Polish Railroads. Przegl.
kolej.mechan. 14 no.7:208-211 JI '62.

1. Centralny Zarząd Trakcji, Warszawa.

TUROWSKI, Eugeniusz, mgr inz.

Some more important directions for locomotive service during
the winter season. Przegl kolej mechan 13 no.1:13-17 Ja '61.

TURCSEKI, Gabriel

Current views on the biological properties of *Bordetella pertussis*.
Postepy Mikrobiol 3 no.3:381-387 '64.

1. Central Vaccine Manufacture, Krakow.

KUSIAK, Bronisław; ~~TUROWSKI~~, Gabriel

Deep aerated culture of Salmonella typhi and Salmonella paratyphi
A and B. Med. dosw. mikrob. 11 no.3:237-247 1959.

1. Z Krakowskiej Wytworni Surowic i Szczepionek Dyrektor: mgr. W. Muz
Doradca naukowy: prof. dr med. Z. Przybylkiewicz
(SALMONELLA PARATYPHI, culture)
(SALMONELLA TYPHOSA, culture)

TUROWSKI, Gabriel

Influence of period of growth on the antigenic properties and yield of *Bordetella pertussis*. Med. dosw. mikrobiol. 15 no.1:43-46 '63.

1. Z Wytworni Surowic i Szczepionek w Krakowie.
(*BORDETELLA PERTUSSIS*) (ANTIGENS) (BACTERIOLOGICAL TECHNIQS)

TUROWSKI, Gabriel

Effect of toxoids on the immunogenic value of the perussia
component. Med. dosw. mikrobiol. 15 no.4:331-335 '63

1. Z Wytworni Surowic i Szczepionek w Krakowie; dyrektor:
dr. Z. Moszczanski.

*

SEMBRAT-NIEWIADOMSKA, Zofia; HOICER, Zygmunt; TUROWSKI, Gabriel

Observations on the relationship between immunological responses of the animal organism to antigens contained in diphtheria-tetanus-whooping cough vaccines. Med. dosw. mikrobiol. 16 no.2:101-110 '64.

1. Z Zakladu Kontroli Technicznej Wytworu Surowic i Szczepionek w Krakowie (Dyrektor: dr. Z. Moszczenski).

TUROWSKI, Gabriel; CHACHULSKA, Władysława

Erdotexin as an adjuvant. I. Effect on the level of precipitins
against human serum proteins. Med. dosw. mikrobiol. 16 no.2:
123-129 '64.

1. Z Wytwórni Surowic i Szczepionek w Krakowie (Dyrektor: dr. Z.
Moszczenski).

SKROCHOWSKA, Maria; TUROWSKI, Gabriel

Endotoxin as an adjuvant. II. Effect on the production of agglutinins against leptospiral antigens. *Med. dosw. mikrobiol.* 16 no.2:131-134 '64.

1. Z Wytworni Surowic i Szczepionek w Krakowie (Dyrektor: dr. Z. Moszczanski).

TUROWSKA, Bozena; TUROWSKI, Gabriel

Endotoxin as an adjuvant. III. Studies on the production of a serum against the G₀ system. Med. dosw. mikrobiol. 16 no.4: 339-343 '62

1. Z Zakladu Medycyny Sadowej Akademii Medycznej (Kierownik: doc. dr. J. Kobieta) i z Wytworni Surowic i Szczepionek (Dyrektor: dr. Z. Moszatenki) w Krakowie.

POLAND

TUROWSKI, Gabriel; and DOLLAR, Barbara; Plant of Sera and Vaccines of the National Institute of Hygiene (Wytworna Surowic i Szczepionek) Krakow

"Investigations on the Chemical Composition of Bordetella Pertussis Lipopolysaccharides in Relation to the Culture Period"

Warsaw, Medycyna Doswiadczalna Mikrobiologia, Vol 18, No 4, 1966; p. 353-359

Abstract [English summary modified]: Study of growth of cell yield and density, agglutinogenic properties and other parameters during 10 days' incubation of Bordetella pertussis strain 134. The chemical composition of lipopolysaccharides was determined; polysaccharides, lipids, nucleic acids, hexoses, phosphates and nitrogen. Authors found a relationship between agglutinogenic properties and the chemical composition, especially lipopolysaccharide content, in cells on different days of culture. 5 diagrams, 2 tables; 6 Polish, 7 Western references.

1/1

TUROWSKI, Janusz

Electromagnetic field losses in the transformer tank. *Elektryka*
Lodz no.3:47-65 '58.

1. Institute of Technology, Department of Electric Machines
and Transformers, Lodz.

TUROWSKI, Janusz

Losses in the cover plates of three-phase transformers caused by electromagnetic fields of bushings. Elektryka Lodz no.4:79-101 '58.

1. Department of Electric Machines and Transformers, Institute of Technology, Lodz.

TUROWSKI, Janusz; PRZYTULA, Andrzej

Propagation of equiphase fluxes in three-winding transformers.
Elektryka Lodz no.8:91-114 '61.

1. Department of Electric Machines and Transformers, Technical
University, Lodz.

TUROWSKI, Janusz

Calculation methods of additional losses caused by the stray field of transformers. Rozpr elektrotech 8 no.3/4:563-599 '62.

1. Katedra Maszyn Elektrycznych i Transformatow, Politechnika, Lodz.

TUROWSKI, Janusz

Losses and local overheating caused by leakage flux.
Elektryka Lodz no.11:89-179 '63.

1. Technical University, Lodz, Department of Electric Machines
and Transformers.

TUROWSKI, Janusz; PAWLOWSKI, Jerzy; PIKIEWICZ, Iwo

Model studies on scattering losses in transformers. Elektryka
Lodz no.12:95-115 '63.

1. Katedra Maszyn Elektrycznych i Transformatorow, Politechnika,
Lodz.

TUROWSKI, Janusz, dr inz.

Wattmeter circuit for measurements in small power coefficients and low voltages. Przegl elektrotechn 11 no. 4:176-177 Ap '64.

1. Department of Electric Machines and Transformers, Technical University, Lodz.

TUROWSKI, Jan

Blood loss in artificial interruption of pregnancy. Ginek. Pol.
36 no.7:785-789 J1'65.

1. Z Kliniki Chorob Kobięcych i Położnictwa Centralnego Szpitala
Klinicznego Wojskowej Akademii Medycznej w Łodzi (Kierownik:
doc. dr. med. J. Hgier).

SCHILLER, Barbara; TUROWSKI, Gabriel; KUSIAK, Bronislaw

Morphology of Salmonella typhi and paratyphi A and B in deep-aerated cultures. Med. dosw. mikrob. 11 no.3:249-253 1959.

1. Z Krakowskiej Wytworni Surowic i Szczepionek Dyrektor: mgr. W. Muz
Doradca naukowy: prof. dr med. Z. Przybylkiewicz.
(SALMONELLA PARATYPHI, culture) (SALMONELLA TYPHOSA, culture)

BRUCKI, J.

Losses in covers of single-and three- phase transformers. P. 67

ROZPRAWY ELECTROTECHNICZNE. (Polska Akademia Nauk, Instytut Badawczych Problemow Techniki) Warszawa, Poland. Vol. 5, No. 1, 1959.

Monthly List of East European accession (EEAI), LC. Vol. 8, No. 9, September, 1959. Uncl.

L 26750-66 EWT(1)/EWT(m)/EWA(d)/T/EWP(t) IJP(c) JD/HW/GG
 SOURCE CODE: UR/0070/66/011/002/0346/0348

ACC NR: AP6011480

AUTHOR: Kirenskiy, L. V.; Galepov, P. S.; Turpanov, I. A.

ORG: Institute of Physics, SO AN SSSR (Institut fiziki SO AN SSSR)

TITLE: Production of thin ferrite films in an inert gas plasma

SOURCE: Kristallografiya, v. 11, no. 2, 1966, 346-348

TOPIC TAGS: magnetic thin film, ferrite, discharge plasma, metal vapor deposition

ABSTRACT: The authors describe the preparation of thin CuFe_2O_4 and NiFe_2O_4 ferrite films by cathode sputtering of polycrystalline ferrites. The work was stimulated by published data by others (J. Appl. Phys. Suppl. v. 33, 110 and 1150, 1962), where it is indicated that sputtering in the presence of a gas yields ferrites of prescribed properties. The vacuum installation used for the sputtering was made of metal and was designed to sputter ferromagnetic materials in xenon gas. The gas flows through the installation during the sputtering (Fig. 1) and its pressure can be maintained constant during that time. The sputtered material serves as a third electrode in a non-spontaneous discharge plasma. The initial ferrites were prepared by usual ceramic technology. The sputtering procedure is described. Three techniques were used: 1) sputtering on a cold substrate and heating in vacuum, 2) sputtering on a hot substrate without heating the vacuum, and 3) sputtering on a hot substrate with heating in vacuum. All films exhibited a spinel structure with lattice periods coinciding with those of the bulk material. The films of the first

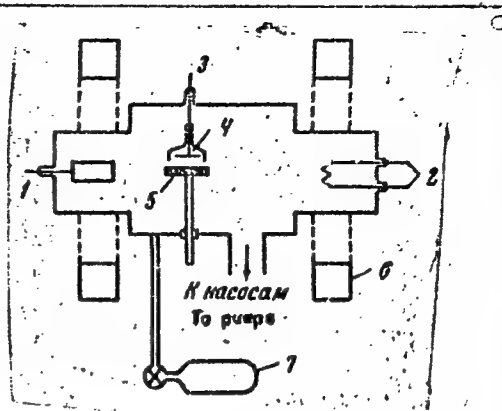
Card 1/2

UDC: 548.0: 539.23

L 26750-66

ACC NR: AF6011480

Fig. 1. Diagram of apparatus for cathode sputtering. 1 - Anode, 2 - cathode, 3 - third electrode, 4 - sample, 5 - substrate holder, 6 - Helmholtz coils, 7 - gas supply.



group contained an amorphous phase and had a finely dispersed structure. The largest crystal structure was produced by the third group. Only the third group possessed a measurable hysteresis. Orig. art. has: 4 figures.

SUB CODE: 20/ SUBM DATE: 06Jan65/ ORIG REF: 007/ OTH REF: 010

Cord 2/2 N

"APPROVED FOR RELEASE: 04/03/2001

CIA-RDP86-00513R001757610010-3

JD/GB

1964/

NO. 4. 1965, 617-619

APPROVED FOR RELEASE: 04/03/2001

CIA-RDP86-00513R001757610010-3"

1983). The equipment is

observations are summarized

formulas and 4 figures. ~~Microfilm type of thin film.~~ Orig. art. has: 2

11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 49. 50. 51. 52. 53. 54. 55. 56. 57. 58. 59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 70. 71. 72. 73. 74. 75. 76. 77. 78. 79. 80. 81. 82. 83. 84. 85. 86. 87. 88. 89. 90. 91. 92. 93. 94. 95. 96. 97. 98. 99. 100. 101. 102. 103. 104. 105. 106. 107. 108. 109. 110. 111. 112. 113. 114. 115. 116. 117. 118. 119. 120. 121. 122. 123. 124. 125. 126. 127. 128. 129. 130. 131. 132. 133. 134. 135. 136. 137. 138. 139. 140. 141. 142. 143. 144. 145. 146. 147. 148. 149. 150. 151. 152. 153. 154. 155. 156. 157. 158. 159. 160. 161. 162. 163. 164. 165. 166. 167. 168. 169. 170. 171. 172. 173. 174. 175. 176. 177. 178. 179. 180. 181. 182. 183. 184. 185. 186. 187. 188. 189. 190. 191. 192. 193. 194. 195. 196. 197. 198. 199. 200. 201. 202. 203. 204. 205. 206. 207. 208. 209. 210. 211. 212. 213. 214. 215. 216. 217. 218. 219. 220. 221. 222. 223. 224. 225. 226. 227. 228. 229. 230. 231. 232. 233. 234. 235. 236. 237. 238. 239. 240. 241. 242. 243. 244. 245. 246. 247. 248. 249. 250. 251. 252. 253. 254. 255. 256. 257. 258. 259. 260. 261. 262. 263. 264. 265. 266. 267. 268. 269. 270. 271. 272. 273. 274. 275. 276. 277. 278. 279. 280. 281. 282. 283. 284. 285. 286. 287. 288. 289. 290. 291. 292. 293. 294. 295. 296. 297. 298. 299. 300. 301. 302. 303. 304. 305. 306. 307. 308. 309. 310. 311. 312. 313. 314. 315. 316. 317. 318. 319. 320. 321. 322. 323. 324. 325. 326. 327. 328. 329. 330. 331. 332. 333. 334. 335. 336. 337. 338. 339. 340. 341. 342. 343. 344. 345. 346. 347. 348. 349. 350. 351. 352. 353. 354. 355. 356. 357. 358. 359. 360. 361. 362. 363. 364. 365. 366. 367. 368. 369. 370. 371. 372. 373. 374. 375. 376. 377. 378. 379. 380. 381. 382. 383. 384. 385. 386. 387. 388. 389. 390. 391. 392. 393. 394. 395. 396. 397. 398. 399. 400. 401. 402. 403. 404. 405. 406. 407. 408. 409. 410. 411. 412. 413. 414. 415. 416. 417. 418. 419. 420. 421. 422. 423. 424. 425. 426. 427. 428. 429. 430. 431. 432. 433. 434. 435. 436. 437. 438. 439. 440. 441. 442. 443. 444. 445. 446. 447. 448. 449. 450. 451. 452. 453. 454. 455. 456. 457. 458. 459. 460. 461. 462. 463. 464. 465. 466. 467. 468. 469. 470. 471. 472. 473. 474. 475. 476. 477. 478. 479. 480. 481. 482. 483. 484. 485. 486. 487. 488. 489. 490. 491. 492. 493. 494. 495. 496. 497. 498. 499. 500. 501. 502. 503. 504. 505. 506. 507. 508. 509. 510. 511. 512. 513. 514. 515. 516. 517. 518. 519. 520. 521. 522. 523. 524. 525. 526. 527. 528. 529. 530. 531. 532. 533. 534. 535. 536. 537. 538. 539. 540. 541. 542. 543. 544. 545. 546. 547. 548. 549. 550. 551. 552. 553. 554. 555. 556. 557. 558. 559. 560. 561. 562. 563. 564. 565. 566. 567. 568. 569. 570. 571. 572. 573. 574. 575. 576. 577. 578. 579. 580. 581. 582. 583. 584. 585. 586. 587. 588. 589. 590. 591. 592. 593. 594. 595. 596. 597. 598. 599. 600. 601. 602. 603. 604. 605. 606. 607. 608. 609. 610. 611. 612. 613. 614. 615. 616. 617. 618. 619. 620. 621. 622. 623. 624. 625. 626. 627. 628. 629. 630. 631. 632. 633. 634. 635. 636. 637. 638. 639. 640. 641. 642. 643. 644. 645. 646. 647. 648. 649. 650. 651. 652. 653. 654. 655. 656. 657. 658. 659. 660. 661. 662. 663. 664. 665. 666. 667. 668. 669. 670. 671. 672. 673. 674. 675. 676. 677. 678. 679. 680. 681. 682. 683. 684. 685. 686. 687. 688. 689. 690. 691. 692. 693. 694. 695. 696. 697. 698. 699. 700. 701. 702. 703. 704. 705. 706. 707. 708. 709. 710. 711. 712. 713. 714. 715. 716. 717. 718. 719. 720. 721. 722. 723. 724. 725. 726. 727. 728. 729. 730. 731. 732. 733. 734. 735. 736. 737. 738. 739. 740. 741. 742. 743. 744. 745. 746. 747. 748. 749. 750. 751. 752. 753. 754. 755. 756. 757. 758. 759. 760. 761. 762. 763. 764. 765. 766. 767. 768. 769. 770. 771. 772. 773. 774. 775. 776. 777. 778. 779. 780. 781. 782. 783. 784. 785. 786. 787. 788. 789. 790. 791. 792. 793. 794. 795. 796. 797. 798. 799. 800. 801. 802. 803. 804. 805. 806. 807. 808. 809. 810. 811. 812. 813. 814. 815. 816. 817. 818. 819. 820. 821. 822. 823. 824. 825. 826. 827. 828. 829. 830. 831. 832. 833. 834. 835. 836. 837. 838. 839. 840. 841. 842. 843. 844. 845. 846. 847

DATE: 1972

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TURSKI, J.

The Festival deed of the youth of the League of Soldier's Friends. p. 3.

SKRZDLATA POLSKA. (Liga Lotnicza) Warszawa, Poland.
Vol.11, no.30, July 1955.

APPROVED FOR RELEASE: 04/03/2001

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Monthly list of East European Accessions (EEAI) LC, Vol.19, no.30, July 1955

Uncl.

TURCWSYI, R.

TURCWSKI, R. Furniture designs and their application in production.
p. 245.

Vol. 6, No. 9, Sept. 1955

PRZEMYSŁ DRZEWNY

TECHNOLOGY

Warszawa, Poland

So: East European Accession, Vol. 5, No. 5, May 1956

TIUROWSKI, R.

In defense of veneer, p. 23. (PRZEMYSŁ DRZEWNY, Warszawa, Vol. 6, no. 2, Feb. 1955.)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, No. 1, Jan. 1955,
Uncl.

TUROWSKI, W.

COUNTRY : Poland

SUBJECT : cultivated Plants. Potatoes. Vegetables.
Cucurbits.

ABST. JOUR: Ref. Zool.-biologiya, No. 5, 1959, No. 00282

author : Mackiewicz, S.; ~~Turowski, W.~~
Inst. of Plant Protection, Poznan

TITLE : Reaction of Several Potato Varieties to
Injury to the Above-Ground Plant Parts.

ORIG. PUB.: Rozn. nauk rolniczych, 1957, 474, No.2, 421-436

ABSTRACT : At the Institute of Plant Protection in Poznan the regenerative capacity was studied in the leaves of four potato varieties (early--Pewesnek and Bem, and late -- Dnr and Parnasia), associated with the problem of producing sufficient yield with damage to the potato tops caused by the Colorado potato beetle. The ability to regenerate leaves was dependent on the length of the vegetation period and occurred more strongly in the later

CARD : 1/3

Calculated Plants.
 AGR. JOUR : Red Leaf - Biologiya, No. 5, 1950, No. 20282

AUTHOR :
 INST. :
 TITLE :

ORIG. PUB.:

ABSTRACT : varieties. The relation sought between great, capability to leaf regeneration in the varieties and the least drop in crop output was not established. In the instance where 20% of the leaves were destroyed the remainder of the crop on the average for all varieties totalled 5.3%, when 40% of the leaves were destroyed the total was 7.9 percent and when 80% destruction occurred the tally was 15%. The very greatest losses, nearly triple the

CARD: 2/3

C. N. Y. :

C. N. Y. :

Cultivated Plants.

M

RIS. JOUR.: Ref Zhur-Biologiya, No. 5, 1959, No. 20282

Author :

Inst. :

Title :

ORIG. PUB.:

ABSTRACT : amount, are caused then the leaves were
destroyed after flowering. The early variety
Perveshnek reacted most strongly to leaf
destruction in the first period. -- Ye.M.
Tavetayeva

CARD :

3/3

Country : Poland M
 Category : Cultivated Plants. Potatoes. Vegetables.
 Cucurbits.
 Abs. Jour. : Ref Zhur-Biologiya, No. 21, 1958, No. 95976
 Author : Turowski, Wacław
 Institut. : Inst. of Plant Protection, Polish AS
 Title : The Sensitivity of Different Potato Varieties
 to Leaf Removal
 Orig. Pub. : Rozzn. nauk rolniczych, 1957, A74, No.2, 470-472
 Abstract : A study of the reaction of potato varieties to
 leaf removal during various periods was undertaken
 by the Institute of Plant Protection of the Polish
 Academy of Sciences. One selected the varieties:
 early maturing P'yervosnek, middle early Bem,
 middle late Parnasiya and the late maturing Dar.
 The leaves were removed by 40 and 80%. The pota-
 toes were harvested on 9 September to 5 October.
 The P'yervosnek variety yielded 97-100% in compari-
 son with the control (whose leaves were not removed
 when 40 and 80% of the leaves were stripped on
 Card: 1/2

M

Country : POLAND
Category: Cultivated Plants. Potatoes. Vegetables.
Cucurbits.

Abs Jour: RZhBiol., No 22, 1958, No 100289.

Author : Turowski, W.; Clegowski, K.
Inst : -
Title : The Influence of Nitrogen Fertilizers on the
Development of Potato Leaves and on Their
Content of Separate Compounds.

Orig Pub: Roczn. nauk rolniczych, 1957, A74, No 2,
473-477

Abstract: Application of 20 and 30 kilograms/ha of N
when growing two varieties of potatoes did
not produce any substantial effect on the
fat content and slightly raised the total

Card : 1/2

Category: Cultivated Plants. Potatoes. Vegetables.
Cucurbits.

Abs Jour: RZhBiol., No 22, 1958, No 100289

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content of nitrogen and carotene in the
leaves. -- Z.I. Zhurbitskiy

Card : 2/2

WIJROWSKI, Z.

Interclub Parachute Championship, p. 12. (SKRZYDLATA POLSKA, Warszawa, Vol. 11, no. 1, Jan. 1955.)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, No. 6, Jan. 1955,
Uncl.

TUROWSKI, Z.

7th Parachute Championship in the Ukraine, p. 12. (SKRZYDLATA POLSKA, Warszawa,
Vol. 11, no. 1, Jan. 1955.)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, No. 6, Jan. 1955,
Uncl.

SAVCHENKO, M.K.; SINEGUBOV, V.I.; KAZULIN, V.A.; TURPANOV, I.A.

Bloch walls as a thin magnetic film. Izv. AN SSSR. Ser. fiz. 29
no.4:617-619 Ap '65. (MIRA 18:5)

1. Institut fiziki Sibirskogo otdeleniya AN SSSR i Krasnoyarskiy
gosudarstvennyy pedagogicheskiy institut.

TURPAYEV, A.I., kand.tekhn.nauk

Wedged analogues of helical three-bar linkages. Izv.vys.ucheb.zav.;
mashinostr. no.11:50-61 '61. (MIRA 14:12)

1. Moskovskiy aviatsionnyy institut.
(Links and link motion)

SOV/179-59-5-28/41

AUTHOR: Turpavev, A.I. (Moscow)

TITLE: Design Analysis of Self-Braking Dog Clutches¹

PERIODICAL: Izvestiya Akademii nauk SSSR, Otdeleniye tekhnicheskikh nauk, Mekhanika i mashinostroyeniye, 1959, Nr 5, pp 140-141 (USSR)

ABSTRACT: The self-braking clutch considered is intended for the driving of a shaft by the torque of a motor in such a way that the rotation is stopped if the load torque exceeds the motor torque and opposes it. The clutch, proposed by O.M.Reykhel', is so arranged that, when the motor is driving, a brake disc is withdrawn from a non-rotating disc and the system rotates freely. The brake disc is withdrawn by axial forces arising in dog clutches (pairs of face cams on the driving and driven shaft ends and on the sleeve mounting the brake disc respectively). The brake disc sleeve is sandwiched between two dog clutches, on the driving and driven shaft sides. When the motor torque diminishes, the axial forces acting from the load side, overcoming the separating springs, press the brake disc against the non-rotating disc and the system is arrested.

Card 1/2 However, friction forces exist between the dog faces.

Design Analysis of Self-Braking Dog Clutches

SOV/179-59-5-28/41

When the difference between the load torque and the motor torque is small, the brake disc will not be pressed against the stationary disc. For this reason, balls are inserted between the dog faces. A design analysis of this arrangement is given ensuring self-braking throughout the torque range. It is possible so to design the device that the separating springs acting on the brake disc will need the same pre-load whatever the torque transmitted. There is 1 figure. ✓

SUBMITTED: March 27, 1959

Card 2/2

TURPAYEV, A. I., Cand Tech Sci -- (diss) "Research into some self-braking mechanisms with coefficient of useful action greater than 50 %." Moscow, 1960. 10 pp; (Ministry of Higher and Secondary Specialist Education REFSR, Moscow Order of Lenin Aviation Inst in Sergo Ordzhonikidze); 160 copies; price not given; (KL, 28-60, 161)

TURPAYEV, A.I.

Theory and design of some high-efficiency self-braking mechanisms.
Trudy Inst. mash. Sem. po teor. mash. 19 no.73:15-38 '59.

(MIRA 13:3)

(Mechanical movements)

PYASIK, Iosif Borisovich; TURPAYEV, A.I., kand. tekhn.nauk, retsenzent;
GOLUB, V.M., inzh., red.; BYKOVSKIY, A.I., inzh., red.;
GORNOSTAYPOL'SKAYA, M.S., tekhn. red.

[Ball-screw mechanisms] Sharikovintovye mekhanizmy. Moskva,
Mashgiz, 1962. 122 p. (MIRA 15:3)
(Gearing, Worm) (Ball bearings)

SOV/179-59-4-26/40

24(6)

AUTHOR: Turpayev, A. I., (Moscow)

TITLE: Investigation of Some Self-braking Mechanisms With Increased Efficiency

PERIODICAL: Izvestiya Akademii nauk SSSR. Otdeleniye tekhnicheskikh nauk. Mekhanika i mashinostroyeniye, 1959, Nr 4, pp 156 - 159 (USSR)

ABSTRACT: Some schemes of mechanisms of three members with an efficiency of more than 50% at self-braking are put forward here. The structure and kinematics of such mechanisms are first investigated. The computation of forces, and determination of the efficiency of self-braking worm drives of three members are then demonstrated. The following drives are investigated: one which transforms the rotary motion into progressive motion, and another one which transforms the progressive motion of the driving member into a progressive motion of the driven member. Numerical computations of self-braking conditions, and the test results are put forward. The investigation carried out shows that it is possible to build a self-braking worm drive with an efficiency of more than 50%. The actual values of efficiency may

Card 1/2

Investigation of Some Self-braking Mechanisms With
Increased Efficiency

SOV/179-59-4-26/40

attain an amount of $60 \div 65\%$ under consideration of a reserve for self-braking of $2 \div 3^0$. It is shown that the efficiency of mechanisms of three members amounts to 1.5 - 2 fold that of the mechanisms with two members at equal reserves for self-braking. There are 4 figures, 1 table, and 2 references, 1 of which is Soviet.

SUBMITTED: January 6, 1959

Card 2/2

11 M

Sulfhydryl groups in the action of acetylcholine and inhibition of the vagus nerve. Kh. N. Koshlovskiy and L. M. Lopyrev (Acad. Sci. U.S.S.R., Moscow). *Nature* 158, 8 (1946). The cardioinhibitory effect due to vagus nerve stimulation and acetylcholine is abolished after application of 10^{-6} and 10^{-4} HgCl₂ to the frog heart. The effect is restored after the HgCl₂ binds SH groups. The inhibition of heart is washed with 2×10^{-2} cysteine. The inhibition of acetylcholine action by atropine is not reversed by cysteine. Also in *Compt. rend. acad. sci. U.R.S.S.* 34, No. 2, 181-3 (1946). Leonard J. Cole

158-564 METALLURGICAL LITERATURE CLASSIFICATION

TURPAYEV, T. M.

USSR/Medicine - Heart, Cardiology
Medicine - Invertebrates

Apr 1948

"Features of Electrocardiograms of Invertebrata
(Grape Snails)," G. D. Smirnov and T. M. Turpayev,
Inst of Evolutionary Morph imeni A. N. Severtsov,
Acad Sci USSR, 3 pp

"Dok Ak Nauk SSSR" Vol LX, No 3

Experiments and studies on elotrocardiograms showed
that these are dependent not only on factors relative
to development of excitation in myocardium but on sum
of processes which result from coordinated action of
various parts of heart. Submitted by Acad I. I.
Shmal'gauzen 27 Feb 1948.

7TT70

TURPAYEV, T. M.

PA 78143

USSR/Medicine - Adrenal Preparations, Effect Jun 1948
Medicine - Hibernation

"Effect of Temperature on the General Action of
Acetylcholine and Adrenalin on the Heart of Hibernating
Mammals," T. M. Turpayev, Inst of Evolutionary Morph
imeni A. N. Severtsov, Acad Sci USSR, 3 1/2 pp

"Dok Ak Nauk SSSR" Vol LX, No 8

Tests on the effect of subject substances on the heart
of hibernating mammals indicate clearer picture of the
dynamics of physiological changes in the heart of hi-
bernating animals, in regard to the ectocardial nerves
during the period of hibernation, and due to excitation
caused by the injection of these substances. Submitted
by Acad I. I. Shmel'gauzen 20 Apr 1948.

7Pthz

112

Ca

Effect of temperature on manifestation of action of acetylcholine and adrenaline on the heart of the hibernating mammal. T. M. Turpaev. Doklady Akad. Nauk S.S.S.R. 60, 1973-8(1948). In expts. on the marmot (which during hibernation often attains a min. temp. of -3° , so that the use of cold Ringer soln. does not disturb heart action), by using the isolated heart perfused by the Langendorf technique at $3-36^{\circ}$ with addns. of 1 cc. acetylcholine or adrenaline solns., showed that a $3-6^{\circ}$ there is no response to acetylcholine of 1×10^{-4} concn., while at $10-18^{\circ}$ the drug hindered heart action. At $18-20^{\circ}$ the action was of longer duration and the neg. inotropic action of acetylcholine was developed; further rise of temp. led to increased neg. chrono- and inotropic action of the drug. Adrenaline at $1 \times 10^{-4} M$ did not have different reactions in the temp. range used; in all cases the typical adrenaline reaction occurred.

G. M. Kosolapoff

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

GROUPS: A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z, AA, AB, AC, AD, AE, AF, AG, AH, AI, AJ, AK, AL, AM, AN, AO, AP, AQ, AR, AS, AT, AU, AV, AW, AX, AY, AZ, BA, BB, BC, BD, BE, BF, BG, BH, BI, BJ, BK, BL, BM, BN, BO, BP, BQ, BR, BS, BT, BU, BV, BW, BX, BY, BZ, CA, CB, CC, CD, CE, CF, CG, CH, CI, CJ, CK, CL, CM, CN, CO, CP, CQ, CR, CS, CT, CU, CV, CW, CX, CY, CZ, DA, DB, DC, DD, DE, DF, DG, DH, DI, DJ, DK, DL, DM, DN, DO, DP, DQ, DR, DS, DT, DU, DV, DW, DX, DY, DZ, EA, EB, EC, ED, EE, EF, EG, EH, EI, EJ, EK, EL, EM, EN, EO, EP, EQ, ER, ES, ET, EU, EV, EW, EX, EY, EZ, FA, FB, FC, FD, FE, FF, FG, FH, FI, FJ, FK, FL, FM, FN, FO, FP, FQ, FR, FS, FT, FU, FV, FW, FX, FY, FZ, GA, GB, GC, GD, GE, GF, GG, GH, GI, GJ, GK, GL, GM, GN, GO, GP, GQ, GR, GS, GT, GU, GV, GW, GX, GY, GZ, HA, HB, HC, HD, HE, HF, HG, HH, HI, HJ, HK, HL, HM, HN, HO, HP, HQ, HR, HS, HT, HU, HV, HW, HX, HY, HZ, IA, IB, IC, ID, IE, IF, IG, IH, II, IJ, IK, IL, IM, IN, IO, IP, IQ, IR, IS, IT, IU, IV, IW, IX, IY, IZ, JA, JB, JC, JD, JE, JF, JG, JH, JI, JJ, JK, JL, JM, JN, JO, JP, JQ, JR, JS, JT, JU, JV, JW, JX, JY, JZ, KA, KB, KC, KD, KE, KF, KG, KH, KI, KJ, KK, KL, KM, KN, KO, KP, KQ, KR, KS, KT, KU, KV, KW, KX, KY, KZ, LA, LB, LC, LD, LE, LF, LG, LH, LI, LJ, LK, LL, LM, LN, LO, LP, LQ, LR, LS, LT, LU, LV, LW, LX, LY, LZ, MA, MB, MC, MD, ME, MF, MG, MH, MI, MJ, MK, ML, MM, MN, MO, MP, MQ, MR, MS, MT, MU, MV, MW, MX, MY, MZ, NA, NB, NC, ND, NE, NF, NG, NH, NI, NJ, NK, NL, NM, NN, NO, NP, NQ, NR, NS, NT, NU, NV, NW, NX, NY, NZ, OA, OB, OC, OD, OE, OF, OG, OH, OI, OJ, OK, OL, OM, ON, OO, OP, OQ, OR, OS, OT, OU, OV, OW, OX, OY, OZ, PA, PB, PC, PD, PE, PF, PG, PH, PI, PJ, PK, PL, PM, PN, PO, PP, PQ, PR, PS, PT, PU, PV, PW, PX, PY, PZ, QA, QB, QC, QD, QE, QF, QG, QH, QI, QJ, QK, QL, QM, QN, QO, QP, QQ, QR, QS, QT, QU, QV, QW, QX, QY, QZ, RA, RB, RC, RD, RE, RF, RG, RH, RI, RJ, RK, RL, RM, RN, RO, RP, RQ, RR, RS, RT, RU, RV, RW, RX, RY, RZ, SA, SB, SC, SD, SE, SF, SG, SH, SI, SJ, SK, SL, SM, SN, SO, SP, SQ, SR, SS, ST, SU, SV, SW, SX, SY, SZ, TA, TB, TC, TD, TE, TF, TG, TH, TI, TJ, TK, TL, TM, TN, TO, TP, TQ, TR, TS, TT, TU, TV, TW, TX, TY, TZ, UA, UB, UC, UD, UE, UF, UG, UH, UI, UJ, UK, UL, UM, UN, UO, UP, UQ, UR, US, UT, UU, UV, UW, UX, UY, UZ, VA, VB, VC, VD, VE, VF, VG, VH, VI, VJ, VK, VL, VM, VN, VO, VP, VQ, VR, VS, VT, VU, VW, VX, VY, VZ, WA, WB, WC, WD, WE, WF, WG, WH, WI, WJ, WK, WL, WM, WN, WO, WP, WQ, WR, WS, WT, WU, WV, WW, WX, WY, WZ, XA, XB, XC, XD, XE, XF, XG, XH, XI, XJ, XK, XL, XM, XN, XO, XP, XQ, XR, XS, XT, XU, XV, XW, XX, XY, XZ, YA, YB, YC, YD, YE, YF, YG, YH, YI, YJ, YK, YL, YM, YN, YO, YP, YQ, YR, YS, YT, YU, YV, YW, YX, YY, YZ, ZA, ZB, ZC, ZD, ZE, ZF, ZG, ZH, ZI, ZJ, ZK, ZL, ZM, ZN, ZO, ZP, ZQ, ZR, ZS, ZT, ZU, ZV, ZW, ZX, ZY, ZZ.

TURPAYEV, T. M.

"Enzymochemical Nature of the Influence of the Vagus on the Heart."
Sub 22 Feb 51, Acad Med Sci USSR.

Cand. Biol. Sci.
Dissertations presented for science and engineering degrees in
Moscow during 1951.

SO: Sum. No. 480, 9 May 55

TURPAYEV, T.M.

Role of sulfhydryl groups in myocardial contractions. *Biokhimiia*,
(CML 21:4)
Moskva 16 no.6:611-614 Nov-Dec 51.

1. Department of General and Comparative Physiology, Institute of
Animal Morphology imeni Academician A.N. Severtsov of the Academy
of Sciences USSR, Moscow.

CA

The dynamics of the processes of origination and destruction of acetylcholine in the heart upon stimulation of the vagus nerve. T. M. Turgut. *Invent. Akad. Nauk N.S.S.R., Ser. Biol.* 1963, No. 4, 130-32. Stimulation of the vagus nerve in frog specimens causes formation of acetylcholine in the heart ventricle; the increase of its concn. over 1-1.5 min. is linear with time. If cholinesterase is inactivated (curine). The destruction of acetylcholine in the heart occurs according to the equation for monomol. reaction, the exponential term being $e^{-k \cdot t}$. On stimulation of the vagus nerve the heart both generates and destroys the acetylcholine giving in this way a dynamic net effective concn. of the substance which is the difference between the 2 processes stated above.

G. M. Kosolapoff

Inst. Animal Morphology in. Severtsov, AS USSR

TURPAYEV, T. M.

Sulphydryl Compounds

Role of tissue sulphydryl groups in causing the vagus nerve to act upon the heart.
Trudy Inst. morf. zhiv. no. 6, 1952.

9. Monthly List of Russian Accessions, Library of Congress, November 1953, Unclassified.

TURPAYEV, T.M.; PERSON, R. S.

Role of sympathetic nervous system in awakening gophers from hibernation. Trudy Inst. morf. zhiv., no. 6, 1952.

(During the awakening of susliks [gophers] from hibernation, their blood contains considerable quantities of sympathicomimetic substances. The content of these substances drops after the animals have awakened. Isolated and perfused hearts of these animals react rapidly to adrenalin, but not to acetylcholine. SO: W-24959, 7 Jan 53)

9. Monthly List of Russian Accessions, Library of Congress, November 1952, Unclassified.

1. KOSETOYNATS, Kh. S METROPOLITANSKAYA, R. L. RYBKINA, D. YE. TURPAYEV, T. M.
2. USSR (600)
4. Karakul Sheep
7. Materials on the physiological characteristics of grey karakul lambs.
Trudy Inst. morf. zhiv. no 152.

9. Monthly List of Russian Accessions. Library of Congress, March 1953. Unclassified.

TURPAYEV, T.M.

Method of registering the tomus of bronchial muscles. *Fiziol.skur.*
39 no.6:732-734 N-D '53. (MLA 6:12)

1. Laboratoriya obshchey i sravnitel'noy fiziologii Instituta morfologii
zhivotnykh im. A.N. Severtsova Akademii nauk SSSR.
(Muscle)

Laboratory of General and Comparative Physiology, "Severtsov" Institute
of Animal Morphology.

A pump of known volume (length of the cylinder 20 cm, diameter six cm)
drives air into the lung at a given pressure, for instance six cm H₂O.
The volume of the excess air which cannot be driven into the lung, is
graphically recorded. The sensitivity of the method is demonstrated in
experiments with injection of carbocholine (decrease of lung volume)
and adrenaline (increase of lung volume) in dogs.

(SO: A-29223, 11 May 54)

TURPAYEV, T.M.; SHATERNIKOV, V.A.

Role of acetylcholine on the negative chronotropic action of the
vagus nerve on the heart. Biul. eksp. biol. i med. 38 no. 8: 3-8 Ag '54.
(MLRA 7:9)

1. Iz laboratorii obshchey i sravnitel'noy fiziologii (zav. chlen-
korrespondent AN SSSR Kh.S. Koshtoyants) Instituta morfologii zhivot-
nykh imeni A.N. Severtsova (dir. chlen-korrespondent AN SSSR G.K.
Khrushchov) AN SSSR, Moskva.

(ACETYLCHOLINE, effects,

on vagus nerve negative chronotropic action on heart)

(NERVES, VAGUS, effect of drugs on,

acetylcholine, on vagus negative chronotropic action on heart)

(HEART, physiology,

eff. of acetylcholine on vagus nerve negative chronotropic
action on heart)

FD-946

USSR/Medicine - Physiology
Turpayev, T. M.

Card 1/1

Pub. 33-29/29

Author

: Turpayev, T. M.

Title

: ~~FROM letters to the editor.~~ Reply to L. P. Perel'man and
Ya. G. Uzhanskiy

Periodical

: Fiziol. zhur. 40, 388, May/Jun 1954

Abstract

: In this article T. M. Turpayev defends his explanation of the results of his experiments in recording the tonus of bronchial musculature published in the Fiziol. zhur. 39, 732, 1953. He refutes the arguments of L. P. Perel'man and Ya. G. Uzhanskiy by stating that they apparently are not well enough acquainted with the situation. The fact is, he states, that the smooth muscles of the bronchi and bronchioles mainly are amenable to pharmacological and neuro-reflex action on the lungs in mammals.

Institution

: --

Submitted

: --

The mode of action of sulfur dryl poisons according to experiments with radioactive silver. T. M. Turnovskiy. Doklady Akad. Nauk S.S.S.R. 94, 973-4 (1954).—Radioactive AgNO_3 solns. were perfused through frog heart-muscle specimens and with aq. solns. of cysteine. The *in vitro* action indicates the reaction $\text{AgNO}_3 + \text{RSH} \rightarrow \text{RSAg} + \text{HNO}_3$. The reaction is not affected by large amts. of S-free amino acids. Treatment of frog-heart specimen with the soln. (5×10^{-4}) for 10-30 sec. increases heart action with uptake of 10-20 γ Ag per g. Introduction of cysteine or 2,3-dimercaptopropanol restores the original amplitude of beat, with lowering of Ag content. Longer contact with AgNO_3 yields greater Ag retention by the muscle, and after 2-3-min. contact there is an abrupt repression of motion with 30-100 γ Ag per g. retention. At this stage the action cannot be restored, and only part of the Ag can be eluted with SH-contg. substances. The results indicate that Ag acts on SH groups of varying degrees of reactivity that are present in the muscle tissue, with the most reactive centers being blocked in the short-period contact with AgNO_3 .
G. M. Kosolapoff

Inst. Morphology in
Seventsov, AS USSR

2
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1

10-14-54
RMZ

TURPAYEV, T. M.

✓ Study of the biochemical basis of the process of nervous
stimulation and blocking with the aid of isotopes. Kh. S.
Koshtoyants, T. M. Turpayev, and D. B. Ryvkina. Conf.
MD Acad. Sci. U.S.S.R. on Peaceful Uses of Atomic Energy,
Session Div. Biol. Sci. 1955, 173-9 (Engl. translation).
Seq. C.A. 49, 10128d. D. M. R.

TURPAYEV, T.M.

/ Study of the biochemical basis of the process of nervous
stimulation and blocking with the aid of isotopes Kh S MD
Koshlovants, T. M. Turpayev and D. E. Ryvkina. *Sovetskaya*
Meditsina 1984, Vol. 1, No. 1, P. 1-4. *Abstracts of Soviet*
Medicine 1984, Vol. 1, No. 1, P. 1-4. *English*
Summary 1984, Vol. 1, No. 1, P. 1-4. *English*
Summary 1984, Vol. 1, No. 1, P. 1-4. *English*
related to pathophysiology of the nervous system
references

TURPAYEV, T.M.

MD ✓ The role of sulfhydryl groups in the activation of the functional properties of acetylcholine. T. M. Turpayev (A. N. Severtsov Inst. Animal Morphol. Acad. Sci. U.S.S.R., Moscow). *Biokhimiya* 20: 176-62, 1975. The anti-agonist Hg²⁺Cl₂ in certain concentrations from heart muscle to lose its response to acetylcholine (ACh) resulting from the reaction of Hg²⁺ with the SH groups of some cellular constituents of the myocardium. The concentration of the myocardium to ACh groups is about 5.5 × 10⁻⁴ M. The SH groups are blocked by Hg²⁺. Approximately 1% of the Hg²⁺ is used reacts directly with the protein structure which causes the functional activation of ACh. This indicates that not more than 1.3-2.0% of the free SH groups of the myocardium normally react with the ACh. The greater part of the Hg²⁺ upon prolonged exposure, causes a disturbance in the heart-contraction app. The difference in the mechanisms of reaction of ACh and atropine is discussed. The introduction of Hg²⁺ into the frog heart concurrently with ACh (concentrations 10⁻⁴ or 10⁻⁵) reduces the anti-ACh activity of the Hg²⁺ on the heart. The introduction of ACh in similar concentrations into the frog heart ventricle containing HgCl₂ arrests the anti-ACh activity of the Hg²⁺ and reduces the rate of Hg accumulation by the heart. The min. concentrations of ACh which bring about such antagonistic action to HgCl₂ at 3.10 × 10⁻⁴ or 1.17 × 10⁻⁴ M are, resp., approx. 10⁻⁵ and 0.50 × 10⁻⁴ M. ACh at 10⁻⁴ M fails to exert such antagonistic action. A difference in the mechanism of action of ACh and HgCl₂ exists, since only ACh inhibits the contractibility of the myocardium. For the realization of the effect of ACh, in addn. to the union via the positively charged N of the mol., there takes place an interaction between the ether grouping of ACh mols. and active groups of the protein mol. H. S. Levine.

FD-2702

USSR/Medicine - Physiology

Card 1/1 Pub. 33-11/28

Author : Turpayev, T. M.; Putintseva, T. G.

Title : The role of the sympathetic nervous system in the compensatory reactions of an organism on asphyxia developing during a spasm of the bronchial Musculature

Periodical : Fiziol. zhur. 41, 71-77, Jan-Feb 1955

Abstract : Investigated the role of the sympathetic nervous system of dogs in the reactions opposing the onset of asphyxia resulting from a spasm of the bronchial musculature on injection of anticholinesterases (physostigmine and "phosphacol"). Graphs. Fourteen reference, 10 of them USSR (9 since 1940).

Institution : Laboratory of General and Comparative Physiology, Institute of Animal Morphology imeni A. N. Severtsov of the Academy of Sciences USSR, Moscow

Submitted : October 21, 1953

TURPAYEV, T. M.

USSR/Medicine - Biochemistry

Card 1/1 Pub. 22 - 35/59

Authors : Turpayev, T. M.

Title : Effect of temperature on the effectiveness of acetylcholine

Periodical : Dok. AN SSSR 102/2, 323-326, May 11, 1955

Abstract : The effect of temperature on the sensitivity of a chamber of an isolated
frog heart toward the effectiveness of acetylcholine was investigated.
Results are described. Four references: 3 USSR and 1 USA (1937-1953).
Graphs.

Institution : Acad. of So., USSR, Inst. of Animal Morphology

Presented by : Academician V. A. Enget'gardt, February 7, 1955

TURPAYEV, T.M.; BORROVA, L.N.; STEPANENKO, B.N.

Effect of phosphorylated carbohydrates on heart muscle. Dokl.
AN SSSR 109 no.5:1077-1080 &g. 1956. (MIRA 9:10)

1. Laboratoriya fiziologicheskoy khimii Akademii nauk SSSR i Laboratoriya obshchey i sravnitel'noy fiziologii Instituta morfologii zhiivotnykh imeni A.N. Severtsova Akademii nauk SSSR. Predstavleno akademikom L.A. Orbeli.
(HEART) (FRUCTOSE--PHYSIOLOGICAL EFFECT) (PHOSPHORYLATION)

TURPAYEV, T. M.

49. Fructose-1,6 Diphosphate Increases Myocardial Contractions During Shock

"The Effect of Phosphorylated Carbohydrates on Heart Muscle,"
T. M. Turpayev, L. N. Bobrova, and B. N. Stepanenko, Laboratory
of Physiological Chemistry, Academy of Sciences USSR, and the
Laboratory of General and Comparative Physiology of the Insti-
tute of Animal Morphology imeni A. N. Severtsov, Academy of
Sciences USSR, Doklady Akademii Nauk SSSR, Vol 109, No 5,
Aug 56, pp 1,077-1,080

The soluble sodium salt of DPF (1,6 diphosphate fructose) in the form
of a yellowish white powder has been prepared and tested on an isolated
frog heart.

Results proved that the perfusion of one ml solution of 0.01 %, 0.05 %, 0.1 %, and 0.2% of DPF increases the amplitude of myocardial contractions for 30, 60-80, 80-100 and 100-200 minutes, respectively. If myocardial contractions become weakened, fresh perfusions evoke fresh responses of increased cardiac contractions.

The authors think that the main reason for the therapeutic effect of DPF during shock is its action on the heart. The biochemical basis for the stimulating effect of DPF on contraction is explained by the fact that during glycolytic processes, there is no need for ATP (adenosine triphosphate) after DPF is formed. Furthermore, during subsequent stages of glycolysis, macroergic compounds are formed and these yield greater amounts of energy than does ATP; for example, diphosphoglycerine and phosphoenol-pyruvic acid. These compounds lead towards the synthesis of ATP. (U)

Sum 1429

TURPAYEV, T.M.; USYNINA, M.G.

Role of the sulfhydryl groups in the contractions of the heart muscle according to experiments with radioactive silver. Biofizika 1 no.1: 36-42 '56. (MLRA 9:12)

1. Institut morfologii zhivotnykh imeni A.N.Severtsova Akademii nauk SSSR, Moskva.

(MERCAPTO GROUP)

(MUSCLE)

(SILVER--ISOTOPES)

"APPROVED FOR RELEASE: 04/03/2001

CIA-RDP86-00513R001757610010-3

The mechanism of a...

APPROVED FOR RELEASE: 04/03/2001

CIA-RDP86-00513R001757610010-3"

TURPAYEV, T. M.

TURPAYEV, T. M.

Med
Action of phosphorylated carbohydrates on heart muscle.
T. M. Turpaev, L. M. Bobrova, and B. N. Shapovalov.
(A. N. Severtsov Inst. Animal Morphol. Moscow, U.S.S.R.)
Izv. Akad. Nauk S.S.S.R. 109, 1977, 90-95.
1,6-diphosphate at 0.2% concn. greatly increases amplitude
of contraction of heart muscle (frog) for 1-2 hrs. with no
phase action; lower concns. are less effective. 1-phosphate
phosphate and -1-phosphate and glucose mixed with inorg.
phosphate show much weaker contractile effects, and fructose
lose or its mixt. with inorg. phosphate had no effect.
G. M. Koshlupoff

USSR / Human and Animal Physiology. Heart.

T

Abs Jour : Ref Zhur - Biol., No 15, 1958, No. 70133

Author : Turpayov, T. M.; Mamedova, L. I.

Inst : Not given

Title : The Mechanism of Action of Cadmium Ions on the Contractile Act of the Myocardium

Orig Pub : Biokhimiya, 1956, Vol 21, No 4, 478-481

Abstract : In experiments on isolated ventricles of frog hearts, stimulated with an induction current at a rate of 30 per minute, the addition of $\text{Cd}^{115}\text{Cl}_2$ to Ringor's solution resulted in inhibition of contractions upon the accumulation of 30-40 gamma and more of Cd per gm of tissue. With the use of cysteine (1×10^{-4}) there was a restoration of contractions, although complete removal of the Cd bound to the tissues of the heart was not achieved. The heart stopped when more than 0.35 percent of the free -SH groups

Card 1/2

USSR / Human and Animal Physiology. Heart.

T

Abs Jour : Ref Zhur - Biol., No 15, 1958, No. 70133

were blocked by Cd. About 80 percent of the Cd was found in the water- and salt-insoluble residue, and about 20 percent in the water- and salt-soluble fractions of proteins. -- A. A. Myazdrikova

Card 2/2

USSR / Human and Animal Physiology. Heart.

T

Abs Jour : Ref Zhur - Biol., No 15, 1958, No. 70134

Author : Turpayov, T. M.; Borbova, L. N.; Stepanenko, B. N.

Inst : Academy of Sciences USSR

Title : The Action of Phosphorylated Carbohydrates on the Myocardium

Orig Pub : Dokl. AN SSSR, 1956, Vol 109, No 5, 1077-1080

Abstract : The 1,6-diphosphate of fructose (I) in a concentration of 0.2 percent produces initially a transient sharp increase in the amplitude of ventricular contractions of the isolated frog heart, then a brief suspension of contraction, and finally, a stable, prolonged increase in strength of contractions. The duration of the third phase depends on the concentration of I. Other phosphorylated hexoses show a very feeble effect on the contractile properties of myocardium. -- M. F. Morezhinskiy

Card 1/1

URPAYEV, T.M.

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K. LUSZCZYNSKI

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(PHOSPHATES, EFFECTS,

diethyl-p-nitrophenyl phosphate on animal organism (Rus))

(NITROBENZENE, related cpds.

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nauk, red.; *TURPAYEV, T.M.*, kand.biol.nauk, redaktor;
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